

1. A computer-implemented method of generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the method comprising:

projecting the bone onto a surface; and

5 generating the shadow on the surface based on a projection of the bone.

2. The method of claim 1, further comprising locating a virtual light source in an environment that the three-  
10 dimensional model inhabits;

wherein projecting the bone comprises:

drawing lines from the virtual light source, through points on the bone, onto the surface; and

connecting points at which the lines intersect the  
15 surface.

3. The method of claim 1, wherein generating the shadow comprises:

creating a shape over at least part of the projection of  
20 the bone; and

mapping texture onto the shape.

4. The method of claim 3, wherein creating the shape comprises growing a polygon from the projection of the bone.

5 5. The method of claim 1, wherein mapping texture onto the shape comprises mapping a fuzzy texture onto edges of the shape.

6. The method of claim 1, further comprising receiving data that corresponds to a size and shape of the shadow;  
10 wherein the shadow is generated based on the data.

7. A computer-implemented method of generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the method comprising:

15 generating a bounding volume for the bone; and  
generating the shadow by projecting a shape of the bounding volume onto a surface.

8. The method of claim 7, further comprising locating a  
20 virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the shape comprises:

drawing lines from the virtual light source, through locations on a surface of the bounding volume, onto the surface; and

connecting points at which the lines intersect the surface.

9. The method of claim 7, wherein generating the shadow further comprises mapping a texture onto the shape of the bounding volume projected onto the surface.

10. The method of claim 7, further comprising receiving data that corresponds to a size and shape of the shadow; wherein the shadow is generated based on the data.

11. An article comprising a machine-readable medium that stores executable instructions to generate a shadow for a three-dimensional model having an infrastructure that includes a bone, the instructions causing a machine to:

project the bone onto a surface; and

generate the shadow on the surface based on a projection of the bone.

12. The article of claim 11, further comprising instructions to locate a virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the bone comprises:

5 drawing lines from the virtual light source, through points on the bone, onto the surface; and

connecting points at which the lines intersect the surface.

10 13. The article of claim 11, wherein generating the shadow comprises:

creating a shape over at least part of the projection of the bone; and

mapping texture onto the shape.

15 14. The article of claim 13, wherein creating the shape comprises growing a polygon from the projection of the bone.

20 15. The article of claim 11, wherein mapping texture onto the shape comprises mapping a fuzzy texture onto edges of the shape.

16. The article of claim 11, further comprising instructions to receive data that corresponds to a size and shape of the shadow;

wherein the shadow is generated based on the data.

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17. An article comprising a machine-readable medium to generate a shadow for a three-dimensional model having an infrastructure that includes a bone, the instructions causing a machine to:

generate a bounding volume for the bone; and

generate the shadow by projecting a shape of the bounding volume onto a surface.

18. The article of claim 17, further comprising instructions to locate a virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the shape comprises:

drawing lines from the virtual light source, through locations on a surface of the bounding volume, onto the surface; and

connecting points at which the lines intersect the surface.

19. The article of claim 17, wherein generating the shadow further comprises mapping a texture onto the shape of the bounding volume projected onto the surface.

5        20. The article of claim 17, further comprising instructions to receive data that corresponds to a size and shape of the shadow;

         wherein the shadow is generated based on the data.

10       21. An apparatus for generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the apparatus comprising:

         a memory that stores executable instructions; and

         a processor that executes the instructions to:

15                project the bone onto a surface; and

             generate the shadow on the surface based on a projection of the bone.

20       22. The apparatus of claim 21, wherein the processor executes instructions to locate a virtual light source in an environment that the three-dimensional model inhabits; and  
         wherein projecting the bone comprises:

drawing lines from the virtual light source, through points on the bone, onto the surface; and

connecting points at which the lines intersect the surface.

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23. The apparatus of claim 21, wherein generating the shadow comprises:

creating a shape over at least part of the projection of the bone; and

mapping texture onto the shape.

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24. The apparatus of claim 23, wherein creating the shape comprises growing a polygon from the projection of the bone.

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25. The apparatus of claim 21, wherein mapping texture onto the shape comprises mapping a fuzzy texture onto edges of the shape.

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26. The apparatus of claim 21, wherein:

the processor executes instructions to receive data that corresponds to a size and shape of the shadow; and

the shadow is generated based on the data.

27. An apparatus for generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the apparatus comprising:

5 a memory that stores executable instructions; and  
a processor that executes the instructions to:

generate a bounding volume for the bone; and

10 generate the shadow by projecting a shape of the  
bounding volume onto a surface.

28. The apparatus of claim 27, wherein the processor  
executes instructions to locate a virtual light source in an  
environment that the three-dimensional model inhabits; and

wherein projecting the shape comprises:

15 drawing lines from the virtual light source, through  
locations on a surface of the bounding volume, onto the  
surface; and

connecting points at which the lines intersect the  
surface.

20 29. The apparatus of claim 27, wherein generating the  
shadow further comprises mapping a texture onto the shape of  
the bounding volume projected onto the surface.



30. The apparatus of claim 27, wherein  
the processor executes instructions to receive data that  
corresponds to a size and shape of the shadow; and  
5 the shadow is generated based on the data.